

REMARKS

Claims 1-31 are pending. Claims 1, 2, 4, 7, 11, 12, 14, 15, 21-30, and 31 have been amended.

On page 2 of the Office Action, the Examiner indicated that the title of the invention is not descriptive. Applicants have amended the title to, "Apparatus, Method, and Computer-Readable Medium for Language Translation."

Claims 2-5, 7, 12, 14-15, 17, 20-23, 27, and 29-30 were objected to due to each limitation in the claim not being discreetly separated from another limitation, using semicolons and line spaces. In response to the objection, Applicants have amended affected claims. Therefore, withdrawal of the objection is respectfully requested.

Claims 21-30 were rejected under U.S.C. § 101 due to the claimed invention allegedly being directed to non-statutory subject matter. According to the Examiner, the claims recite software *per se*. Applicants have amended the affected claims to recite "a computer-readable medium." Therefore, withdrawal of the rejection is respectfully requested.

Claims 1, 5-6, 8, 11, 15-16, 18, 21, 25-26, 28 and 31 were rejected under 35 U.S.C. § 102(a) as being anticipated by an article entitled "Machine Translation of Very Close Languages," authored by Jan HAJIC *et al.*

In the translation supporting apparatus of the present invention, as defined by currently amended claim 1, the original/translation database has an original/translation sentence database which is used by the translation memory device; an analyzed original/translation sentence database in which original/translation sentences have been analyzed by a morpheme analysis or a syntax analysis; and a dictionary in which original/translation words and original/translation patterns which are used by the machine translating apparatus have been registered.

The data compatible processing unit adds the original/translation sentences obtained by the machine translating apparatus or sentences obtained by correcting the original/translation sentences obtained by the translation memory device into the original/translation sentence database, adds the original/translation sentences obtained by the translation memory device or original/translation sentences translated by the user into the original/translation sentence database, adds analyzed original/translation sentences obtained by analyzing the original/translation sentences into the analyzed original/translation sentence database, and further extracts the original/translation words or original/translation patterns from the analyzed

original/translation sentences, and adds them into a dictionary of the machine translating apparatus.

Thus, the original/translation information obtained by the machine translating apparatus is reflected to the search database which is used by the translation memory device and, at the same time, the original/translation information accumulated in the search database of the translation memory device is reflected to the dictionary of the machine translating apparatus. Since each original/translation information can be used as common resources, the automatization of the translating work is further progressed. There can also be improvement of the working efficiency and the translation quality.

On page 9, in section "2.2 Translation memory is the key", Hajic describes a translation system based on a machine support using a translation memory referred to as TRADOS.

The Hajic system registers in a memory pairs of already translated source-language sentences and target-language sentences, retrieves target-language sentences similar to source-language sentences serving as a key, and directly subjects them to a translating operation through correction. Hajic discloses a combination of a machine translating apparatus and a translation memory device. Since the result of the machine translation is reflected in the translation memory, data compatibility processing is carried out.

The Hajic translation memory divides the memory, using the following two portions:

- (1) a translation memory formed from the result of human translation; and
- (2) a translation memory formed from the result of machine translation. Naturally, the translation memory (1) has a higher priority, and the translation memory based on machine translation plays a role of filling up the time before accumulation of arbitrary results of translation.

Applicants respectfully submit that the claims of the present invention are patentable over Hajic, as Hajic does not teach each and every feature of the claims. For example, Hajic fails to disclose, "a data compatible processing unit that extracts original/translation words or original/translation patterns from said analyzed original/translation sentences, and adds them into a dictionary of said machine translating apparatus." Hajic discloses nothing about reflecting the result of translation of the translation memory device to the dictionary of the machine translating apparatus.

Although the Examiner holds that the addition to the dictionary of the machine translating apparatus is obvious from the description of Kumito, Kumito merely teaches a package

processing by an operator of original unknown words not found in the dictionary of the machine translating apparatus. In contrast to the present invention, in Kumito, the machine translation is performed in a state in which unknown words not registered in the dictionary in the original are automatically retrieved to form a list, and unknown words are eliminated by registering the same.

Therefore, currently amended independent claim 1 is patentable over both Hajic and Kumito. As independent claims 11, 21, and 31 recite language similar to that of claim 1, independent claims 11, 21, and 31 are also patentable over the references. As dependent claims 5-6, 8, 15-16, 18, 25-26, and 28 depend from respective independent claims, the dependent claims are patentable over the references for at least the reasons presented above for the independent claims.

Claims 2, 12, and 22 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Hajic in view of Kimito. As claims 2, 12, and 22 depend from respective independent claims, claims 2, 12, and 22 are patentable over the references for at least the reasons presented above for the independent claims.

Claims 3, 13, 23, 7, 17, and 27 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Hajic and Kimito "as applied to claims 1, 11, and 21 or 2, 12, and 22, respectively, and further in view of U.S. Pat. No. 6,285,978 (Bernth)."

As dependent claims 3, 13, 23, 7, 17, and 27 depend from respective independent claims, the dependent claims are patentable over the references for at least the reasons presented above for their respective independent claims.

Bernth is directed to a computer translation system and method for natural language translation. According to Bernth, its translation system translates a source natural language segment (for example, English) of one or more source words/elements into a target natural language segment (for example, German) of one or more target words/elements. Bernth discloses a transfer dictionary file. According to Bernth, a transfer process accesses a transfer dictionary file to produce an initial transfer structure from a source parse structure. In contrast to the present invention, Bernth does not add to a dictionary, much less adding to a dictionary in a manner identified by the language of currently amended claim 1, for example.

Therefore, neither Hajic, Kimito, nor Bernth, taken alone or in combination, teaches or suggests the above-identified feature of the claims.

Claims 4, 14, 24, 10, 20, and 30 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Hajic as applied to claims 1, 11, and 21. As claims 4, 14, 24, 10, 20, and 30 depend from respective independent claims, the dependent claims are patentable over the

references for at least the reasons presented above for the independent claims, in addition to other reasons.

For example, claim 4 is characterized in that translation by the machine translating apparatus and translation by the translation memory device are simultaneously performed, results of both translations are compared, and input words of different results are machine-translated to replace the different portions in the translated sentences in the translation memory, as indicated by the language of claim 4.

With regard to the above-identified characterization, the Examiner holds that although none of the references describe combining the machine translating apparatus and the translation memory device means originally in the manner of use identified by the language of claim 4, the feature is obvious via the assertion of Official Notice.

Applicants respectfully submit that the Examiner has not provided a sound line of technical reasoning for the assertion. According to the Examiner, combining the machine translating apparatus and the translation memory device does not require a special contrivance, thereby rendering the subject matter recited in claim 4 allegedly obvious. As indicated by the language of claim 4, in at least one embodiment of the present invention, it is necessary to provide the interface unit of claim 1 having functions as shown in Figs. 2A-2B of the present invention. As identified by the language of claim 4, an interface unit is employed and the apparatus and the device are simultaneously operated in parallel.

Therefore, claim 4 is patentable over the references for the above-identified reasons, in addition to the reasons previously presented.

On page 13 of the Office Action, claims 9, 19, and 29 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Hajic as applied to claims 1, 11, and 21, respectively, and further in view of Japanese patent publication no. 09-134358 (Fumito).

Fomito is directed to judging a difficulty range from morphemic information based upon a reference and does not teach or suggest the above-identified feature of claims 9, 19, and 29 as recited via their respective independent claims.

It is submitted that the claims satisfy the requirements of 35 U.S.C. §§ 102 and 103. The claims are therefore in a condition suitable for allowance. An early Notice of Allowance is requested.


If any further fees, other than and except for the issue fee, are necessary with respect to this paper, the U.S.P.T.O. is requested to obtain the same from deposit account number 19-

3935.

Respectfully submitted,

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